X-1018 US PATENT

METHOD FOR COMPUTING AND USING FUTURE COSTING DATA IN SIGNAL ROUTING

## ABSTRACT

A systematic method for calculating future cost is disclosed. Pre-routing is performed from a source node to other nodes through a series of neighboring nodes. At each node in the pre-routing, the cumulative routing cost and Manhattan distance are calculated. This cumulative routing cost is used as a new future cost for a specific distance if it is lower than or there is no existing future cost for that distance. A table can be used to store the future cost data. During routing, the recorded future cost is added to the cumulative cost of a node to help guide the routing, improving router run-time.